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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 09/284,222 | 07/22/99 | TSUJIMOTO | H P990708 |

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IM62/0605

EXAMINER

WEINER, L

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 06/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/284,222

Applicant(s)
Tsujimoto et al.

Examiner
Laura Weiner

Group Art Unit
1745

☒ Responsive to communication(s) filed on Jul 22, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 7-12 is/are pending in the application

Of the above, claim(s) none is/are withdrawn from consideration

☐ Claim(s) is/are allowed.

☒ Claim(s) 7-12 is/are rejected.

☐ Claim(s) is/are objected to.

☐ Claims are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received:

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the cancellation of claims 1-6 and addition of claims 7-12 cited in PreAmendment A dated 9-22-99. Claims 7-12 have been examined on their merits.

Claim Rejections - 35 USC § 112

2. Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 9 and 10 are rejected because it is unclear what is meant by "aeromatic".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-9, 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiura et al. (EP 0 726 607 A1).

Fujiura et al. teaches an electrode paste composition for an alkaline storage battery comprising 100 weight parts of an active material; 0.05-7 weight parts of a conductive agent such

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as carbon black, nickel and cobalt metal powders; 0.2-10 weight parts of a fluorine resin and 0.01-2 weight parts of a thickener comprising a water-insoluble water-absorbent resin. Fujiura et al. teaches on page 4, that the thickener may include further thickeners such as water-soluble polymers such as carboxy methyl cellulose (CMC). Fujiura et al. teaches on page 5, that different kinds of active materials are used depending on whether a positive or negative electrode is concerned. Examples of the active materials for the negative electrode include cadmium powders and hydrogen-storing alloy powders. Fluorine resins are used as a binder to firmly affix an active material. Examples include polytetrafluoroethylene, tetrafluoroethylene-hexafluoropropylene copolymers and a combination of these fluorine resins and thermoplastic resins such as polyvinyl alcohol, styrene-butadiene copolymers and styrene-isopropylene copolymers [*mixture of fluorine polymer such as polytetrafluoroethylene and an aromatic vinyl-conjugate diene polymer such as styrene-butadiene copolymer*].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiura et al. (EP 0 726 607 A1).

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Fujiura et al. teaches an electrode paste composition for an alkaline storage battery comprising 100 weight parts of an active material; 0.05-7 weight parts of a conductive agent such as carbon black, nickel and cobalt metal powders; 0.2-10 weight parts of a fluorine resin and 0.01-2 weight parts of a thickener comprising a water-insoluble water-absorbent resin. Fujiura et al. teaches on page 4, that the thickener may include further thickeners such as water-soluble polymers such as carboxy methyl cellulose (CMC). Examples of the active materials for the positive electrode include nickel hydroxide powders. Fluorine resins are used as a binder to firmly affix an active material. Examples include polytetrafluoroethylene, tetrafluoroethylene-hexafluoropropylene copolymers and a combination of these fluorine resins and thermoplastic resins such as polyvinyl alcohol, styrene-butadiene copolymers and styrene-isopropylene copolymers.

Fujiura et al. teaches the claimed invention except does not teach having a weight mixture ratio of the fluorine polymer to the aromatic vinyl-conjugate diene polymer that ranges from about 1 to about 99.

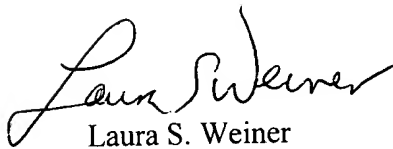
It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a ratio of the fluorine polymer to the aromatic vinyl-conjugate diene polymer that ranges from about 1 to about 99 because Fujiura et al. teaches that the binder can be a combination of fluorine resins and thermoplastic resins and since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner can normally be reached on Monday-Friday from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maria Nuzzolillo, can be reached on (703) 305-3776. The official fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Laura S. Weiner
Patent Examiner
Art Unit 1745
June 1, 2000